HAEHNE

Product Desription

Profibus Amplifier Busbox-PS2

Special Features

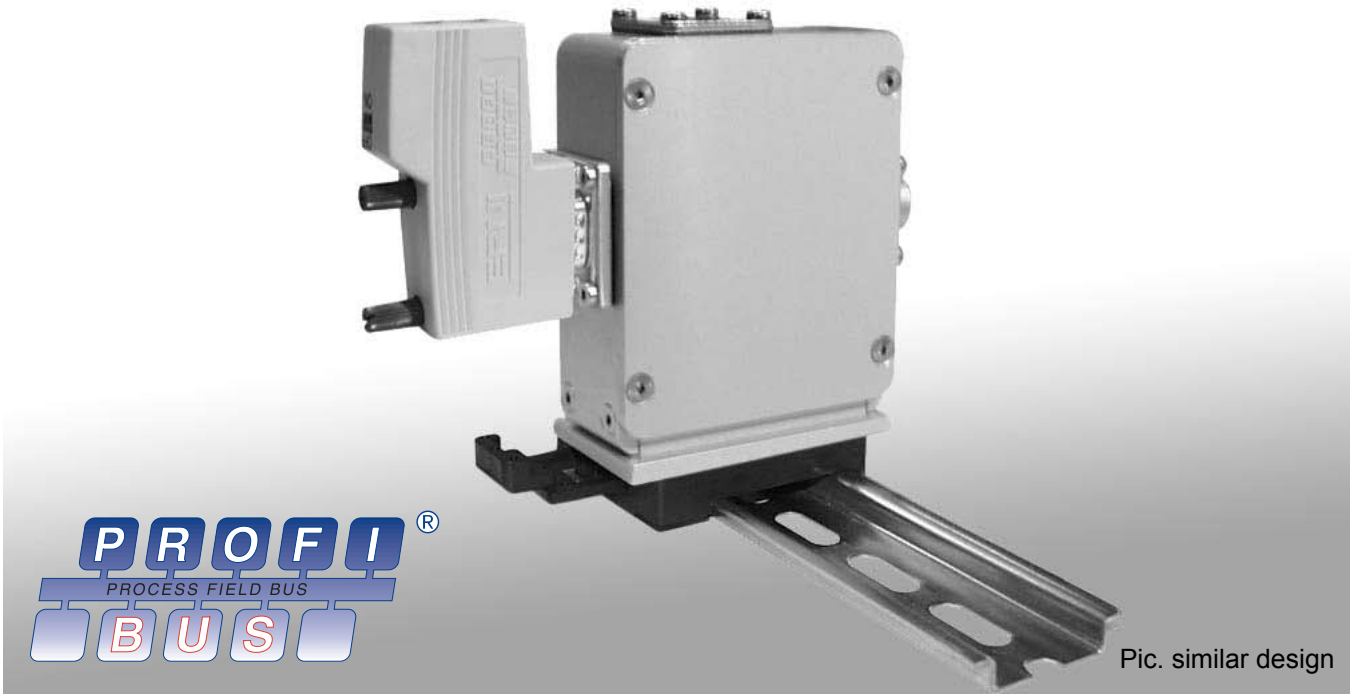
- ❒ Amplifier with Profibus interface as DIN railmount version
- ❒ Designed for strain gauge sensors
- ❒ User friendly commissioning via GSD file
- ❒ Transmission range up to 12 Mbit/s
- ❒ 16 bit resolution

Scope of Supply

- **Electronic unit** designed into an aluminium enclosure
- **GSD-file on disk**
- **1 Sensor plug**
- **Cable socket** for external power supply (X1)

Also Available

- **Profibus Sub D-plug**
- **Option F:** (potentially explosive atmospheres): Use with safety barriers



Pic. similar design

Application

The Busbox-PS is used whenever strain gauge sensors are to be connected to the Profibus DP. The primary application field is the web tension measurement.
A bus box is assigned to each sensor, the addresses are assigned accordingly and the appropriate value is transferred to the bus.
The „S“ version is intended for switch cabinet mounting on common DIN mounting rails.

The electronic module consists of on analogue and a digital PCB. It can power one sensor and process the measuring signals.
The measurement values are converted into digital signals, averaged and transmitted to the interfaces module every 3 ms.
The interface module converts the signal to the appropriate data format for transmission to the bus.

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Busbox-PS2

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Technical Data

Power supply V_5	20,5…30 V, max 150 mA
Supply voltage	4,5 V / 18 mA
Signal	-10,8 mV…0 mV…+10,8 mV ≙ 8000…0000…7FFF
Standard protection	IP20
Nominal temperature range	+10…+60 °C
Operational temperature range	0…+60 °C

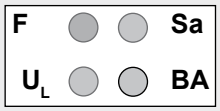
Profibus DP	
Participant-ID	00E7 hex (Data standardized in GSD-file “HAEH00E7.GSD“)
Data width	1 word
Resolution	16 bit
Weight	175 g

Sensor Connection (receptacle)

lead color	pin-no.	**X3**
white	1	$+V_1$
brown	2	$-V_4$
green	3	$-V_1$
yellow	4	$+V_4$
	field	enclosure

V_1:output s. V_4:supply s.

Operation display



U_L	green	power supply is on
Sa	green	Slave adress will be changed
BA	green	Profibus Data exchange
F	red	Configuration error

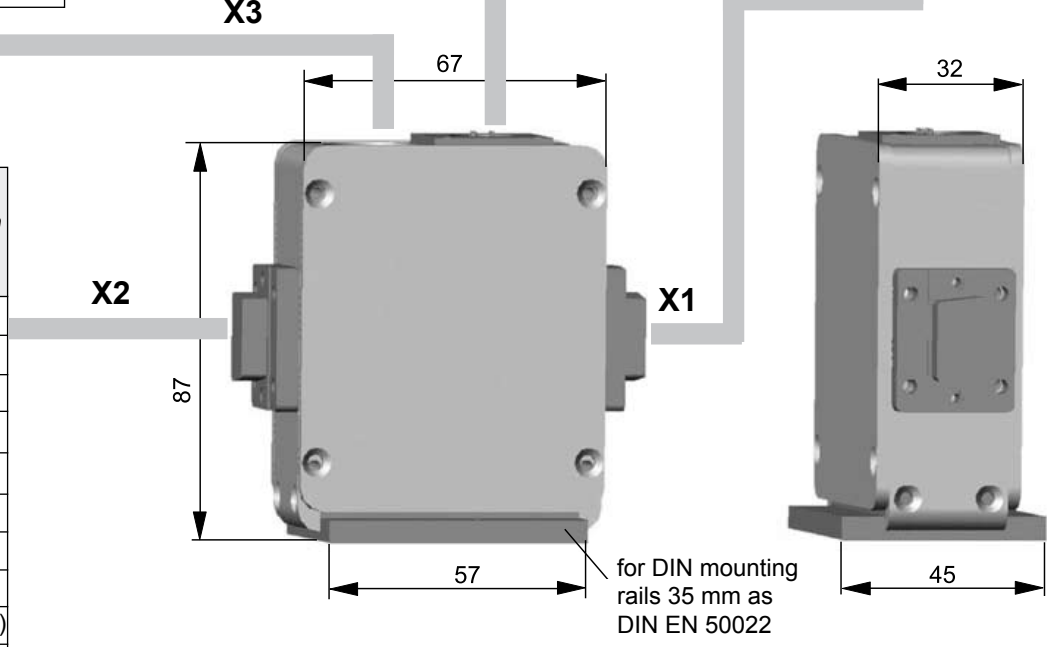
Amplifier Power Supply (pin)

lead color	pin-no.	**X1**
white	1	+24 V (V_5+)
brown	2	GND (V_5-)
green	3	PE
	field	enclosure

V_5: amplifier supply 24 V

Profibus DP Connection (Sub D-plug)

pin-no.	function
1	n. c.
2	n. c.
3	line B (red)
4	RTS
5	DGND
6	VP / VCCI
7	n. c.
8	line A (green)
9	n. c.



Please consider with the order:
The amplification of the Busbox is presetted and in particular correlation with the nominal rating of the HAEHNE sensor.

Version Busbox	Nominal Rating HAEHNE-Sensor
-PS2-1,5	1,5 mV/V
-PS2-1,0	1,0 mV/V
-PS2-0,75	0,75 mV/V
-PS2-0,5	0,5 mV/V

Ordering data:
Busbox-PS2-1,5F

- Option
- Nominal Rating
- Version for DIN mounting rail
- Profibus
- Type

Ordering example for Option F:
Indicate the total resistance from measuring chain for option F (e. g. 350 Ohm):
Busbox-PS2-1,5F350

Technical modifications reserved.

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